Appendix D:

Arborist Survey and Assessment of a Single Valley Oak

December 31, 2018

Troy Fujimoto
City of Pleasant Hill
100 Gregory Lane
Pleasant Hill CA, 94523

SUBJECT: Survey of trees at 3195 N. Main Street, Pleasant Hill and their condition at the time of survey. We observed these trees on December 11th, 12th, and 29th, 2018.

PURPOSE OF THIS REPORT

Pleasant Hill requires a report for trees within approved landscapes in commercial zones, which triggers the need for this document.

This report includes all such trees. The purpose of this report is to identify each of these trees and describe their location and condition.

In standard form, this report would provide probable impacts that will occur to trees as a result of the proposed demolition and construction, as well as specific measures for managing and reducing impacts to trees that will be preserved, to hold impact levels to those described.

This report does not provide probable impacts to trees or measures for managing and reducing impacts to them, and therefore serves purpose as a tree survey, rather than report.

Despite this, you will find general guidelines for the best management practices for construction work near trees in the section titled "Temporary Protective Zones, Tree Protection Measures", on page 4.

SUMMARY

You will be removing existing buildings, flatwork, and associated utilities, and installing new buildings, flatwork, and associated utilities.

This report considers 68 trees. Of the 68 trees, 27 belong to neighbors and overhang property lines. Of the 27 trees, 17 are close enough to the existing western cinderblock wall on the neighboring side, that they may be injured by excavation, subexcavation, wall replacement, or other disturbance of existing soil on the hotel side.

POTENTIAL DISTURBANCE TO TREES

Damage to trees may occur directly, from mechanical injury to roots, trunks or limbs, or more indirectly, if soil characteristics, such as density, soil atmosphere or moisture

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content are altered. Manifestations of these injuries may occur immediately, or may be delayed for a number of years, resulting in progressive decline.

Many tree roots on most sites, including this one, may be in the top 18 inches of soil, a zone which is easily altered by even minor grading, trenching, or material storage. Further such alterations may occur during demolition, grading, construction, and landscaping activities. Soil may become further compacted, soil oxygen may then become easily depleted, drainage patterns upon which trees have become dependent may be altered, so that trees become drought stressed. Any changes in grade, increase or decrease, compaction, or pavement may have this effect. Where cuts must be made for utilities or other reasons, the soil may quickly dry out from the side of the cut and kill roots.

Awareness of these concepts is key to tree management on construction sites. It is less important to avoid encroachment under tree canopies, which may be acceptable, than it is to dedicate a reasonable and necessary area under the tree as a protected root zone, and assure that this area remains dedicated to the needs of the roots.

If such an area cannot be dedicated to a given tree, or the condition of that tree is such that it may not contribute into the future, the tree should be removed.

SITE MAP

The base site map is provided by Ken Alcock of Milani & Associates, and I have modified it appropriately. Trees are numbered on the drawing, corresponding to the table in this report and to tags placed on the tree trunks. The map is attached to the end of this document as a 30 scale, 11 x 17 inch PDF.

Typically, canopy outlines are intended as a guideline to establishing tree protection zones, that is, protecting a sufficiently large root area to assure survival of the tree. This map does not provide accurate canopy outlines. As noted in the previous section encroachment into the canopy is acceptable depending on the vigor of the tree and degree of protection for roots in the area remaining in the tree protection zone outside the encroachment.

No protection measures have been specified in this report.

HOW TO READ THE TABLE OF TREES

The specific information for each of the 68 trees assessed is found in the table attached to this report, at the end.

The Species of each tree or shrub is noted in the second column, by common name.

The Diameter of the trunk, or trunks, in inches, is given in the third column, measured at 54 inches, or at the best representative height. If there are several trunks, each is listed.

The Health of the tree and the Structure are rated in the next two columns. Both are rated on a scale of 0-5, with 5 being the most favorable. Health is a measure of the vigor of the tree. Lower ratings, (below 3) indicate that a tree is seriously declining in health.

Structure is a measure of the mechanical form and arrangement of the trunk and limbs. Trees with low structure ratings may have codominant limbs or included bark, as described above, or may have failed mechanically in the past, or are for other reasons at higher risk to do so in the future than trees with higher (better) structure rating.

Suitability is an assessment of how desirable the retention of this tree is, independently of proposed design or site alterations. This rating is based on intrinsic features of the tree itself. It is a combination of:

- Species. Oaks are generally highly desirable. Redwood are less so in Contra Costa County, as they are water-demanding.
- Health and Structure. Trees with defects or health problems do not warrant special effort to retain.
- Nearby trees. If trees are crowded some may be less desirable.
- Size. Even highly desirable species in good condition can be replaced if they are small enough. Their suitability rating is thus lower.

Generally, trees with a suitability rating of 4 or 5 are worth extra effort to preserve. This does not mean that they must be preserved, or that it is inappropriate to remove them or permit activities that may affect them. Realistic use of the lot may require construction near, or removal of otherwise desirable trees. The best use of the land may require removal of or impact on even trees with the highest suitability.

Trees with a rating of 3 should be considered for retention.

For trees with a suitability of 1 or 2, no effort should be made to preserve. This does not mean they should not be retained, only that, unless there are other considerations, the project should not be specially altered to accommodate them.

Trees with a suitability of zero are generally incapable of providing benefit in the developed setting and should usually be removed.

Trees overhanging property lines, belonging to neighbors, have a default suitability of 5, as the property owner determines benefits provided to them by their tree; any potential impacts to these trees should be discussed with owners to avoid conflict during or after construction. Trees belonging to neighbors at highest risk of impact can be found in the table, with rows shaded gray.

The Comments column contains general observations about each tree.

TEMPORARY PROTECTIVE FENCING, TREE PROTECTION ZONES
As previously mentioned, no protection measures have been specified within this report.

As a general rule, and to comply with best management practices for construction near trees, we recommend the following:

- Potential impacts to trees belonging to neighbors should be discussed with property owners prior to demolition.

- No grading or trenching for irrigation, planting or lighting should occur within the fenced zone or near the unfenced shrubs and trees without review and approval of the project arborist.

- There may be no temporary storage of construction materials within driplines, or tree protection zones. There must be no disposal of waste or equipment washout that could drain into the protected zone or on to other protected plants or plants owned by neighbors.

- Any protective fencing should be six foot chain link securely fastened to the ground or on driven posts, to prevent casual displacement by site workers who may not understand its purpose. The location should be reviewed in the field to the satisfaction of both the arborist and the general contractor or site supervisor.

- Fencing must be placed prior to any work on the site and must remain through completion. It shall not be moved by any subcontractor for any reason, without approval of the project arborist.

- The purpose and importance of the fence should be understood by contractors and subcontractors.

- Plasticized signs, 8 ½ by 11 inches or larger, should be placed on the fence (inside, facing out, to prevent vandalism) every 50 feet. The signs should advise, in large type, not to move the fence without the approval of the project arborist. A sample sign, which may be copied, is attached at the end of the report.

LIMITING CONDITIONS OF THIS REPORT

The observations and recommendations in this report are limited to current conditions, for the site, as described in the report. There appeared to be no indication for laboratory diagnostics, extensive basal inspection, nor aerial inspection, and this report does not contain them.

This report relies upon representations by Milani & Associates concerning property and easement boundaries, proposed construction, and locations of trees 80, 83, 87, 88, 97, 594, 598, 599, 600, 802, 803, 806, 808, 811, 814, 815, & 816. All other trees were located by myself, and therefore lack the precision of a formal surveyor.

My comments on the health, structure, and potential of these trees are restricted to the condition of the trees if the general specifications in this report and specific recommendations in any future reports are observed and followed.

It is outside the scope of this or the final report to suggest suitability of design or land use.

CERTIFICATION OF THIS DOCUMENT

I certify that the observations and recommendations in this document are complete and correct, to the best of my knowledge and belief, and are made in good faith.
Please contact me as further questions arise.

Sincerely,

Todd McNeil
Certified Arborist #WE-11635A
ISA Qualified Tree Risk Assessor

THIS FENCE MAY BE MOVED ONLY WITH PERMISSION OF THE PROJECT ARBORIST

Tree Number	Species	Diameter	Health	Structure	Suitability	Comments	Neighbor rights
						All trees other than 80,83,87,88,97,594,598,599,600,802,803,806,808,811,814,815,& 816 have been located by the arborist, and therefore lack precision of a formal surveyor.	
						The accompanying map to this list is provided as an 11 x 17 inch, 30 scale PDF.	
						Trees in rows shaded gray are close to the existing western cinderblock wall on the neighboring side, and may be injured by excavation, subexcavation, wall replacement, or other disturbance of existing soil on the hotel side.	
80	Elm spp	23 @ 1'	3	3	3	Codominant at 3 feet with included bark, witches broom on shoots	
82	Crape myrtle	4	4	3	1	Remove stakes	
83	Coast redwood	13	3	4	0		
86	Coast redwood	6	3	4	0	Subordinate beneath 83	
87	Coast redwood	8	3	4	0	Subordinate beneath 83	
88	Coast redwood	10.5	3	4	0	Subordinate beneath 83	
89	Crape myrtle	~3,3,3,3,3,3,3,3,3,3	4	1	1	No tag, undersized	
90	Crape myrtle	~1,1,1,1,1,1,1,1,1,1	2	2	0	No tag, ~50% dieback	
97	Coast redwood	20	4	4	1		
594	Coast live oak	10,9,8,7,6,5,5,5,4,3,3,4,5	5	2	3	Excess soil at base	
595	Coast live oak	6,4,3,3	5	3	2		
596	Coast live oak	5,3	4	3	1		
597	Elm spp	10	3	4	2		
598	Valley oak	55	4	2	3		
599	Mexican fan palm	26,26	4	2	1	Codominant at base	

Tree Number	Species	Diameter	Health	Structure	Suitability	Comments	Neighbor rights
600	Mexican fan palm	20	4	4	1		
801	Elm spp	3,1	4	3	1		
802	Holly oak	8	4	3	2		
803	Crape myrtle	9	4	2	1	Topped at 6' and 7'	
804	Mexican fan palm	~14	5	5	1		
805	Crape myrtle	7,2,2,2,2,2 ,2,2,2,2,2	4	1	1		
806	Holly oak	8.5	5	3	3	Topped at 6'	
807	Privet	4,4,4	4	2	1	Tridominant at base	
808	Crape myrtle	8.5	4	3	1	Root system disrupting curb to east, topped at 6'	
809	Black locust	4	4	3	1		
810	Western cottonwood	5.5	4	4	1		
811	Mexican fan palm	~30	4	5	1		
812	Privet	5	2	3	1	~40% dieback	
813	Privet	4,4,3	4	2	1		
814	Coast redwood	21	1	4	0	Diameter taken just above burl ~5.5' - in severe decline	
815	Mexican fan palm	19	5	5	1		
816	Mexican fan palm	13	5	5	1		
819	Camphor	11.5	2	3	5	Neighbor tree, behind wall - 3' off wall	x
820	Camphor	25	3	3	5	Neighbor tree, behind wall - 6' off wall	x

Tree Number	Species	Diameter	Health	Structure	Suitability	Comments	Neighbor rights
821	Camphor	13	3	3	5	Neighbor tree, behind wall - 4' off wall	x
822	Camphor	12.5	3	3	5	Neighbor tree, behind wall - 4' off wall	x
823	Valley oak	16	4	3	5	Neighbor tree, behind wall - 6' off wall - near HV lines	x
824	Valley oak	23 @ 1.5'	3	3	5	Neighbor tree - codominant at 4' with included bark from 1'-4'	x
825	Silk tree	~10	3	2	5	No tag - neighbor tree behind wall	x
826	Purple plum	~4,4,4,4,4,4	3	2	5	No tag - neighbor tree behind wall	x
827	Privet	~4,4,4,4,4,4,4,4,4,4	3	2	5	No tag - neighbor tree behind wall	x
828	Camphor	~18	2	2	5	No tag - neighbor tree behind wall - topped at 10', 30%-40% dieback	x
829	Privet	3,3,3,3,3,3,3,3,3,3	4	2	5	No tag - neighbor tree behind wall	x
830	Canary Island date palm	~60	4	5	5	No tag - neighbor tree behind wall	x
831	Valley oak	~48	4	3	5	No tag - neighbor tree behind wall	x
832	Elm spp	~12	3	2	5	No tag - neighbor tree behind wall	x
833	Elm spp	~28	3	2	5	No tag - neighbor tree behind wall - leans heaviliy over wall	x
834	Valley oak	~12,8	3	3	5	No tag - neighbor tree behind wall - leans heaviliy over wall	x
835	Elm spp	~8	3	3	5	No tag - neighbor tree behind wall - leans heaviliy over wall	x
837	Elm spp	~8,8	3	3	5	No tag - neighbor tree behind wall	x
838	Ailanthus	~12	?	2	5	No tag - neighbor tree behind wall	x
839	Elm spp	~12	3	2	5	No tag - neighbor tree behind wall - topped	x
840	Privet	~6	3	3	5	No tag - neighbor tree behind wall	x

Tree Number	Species	Diameter	Health	Structure	Suitability	Comments	Neighbor rights
841	Ailanthus	~10,6	1	3	5	No tag - neighbor tree behind wall	x
842	Elm spp	~12	3	3	5	No tag - neighbor tree behind wall	x
843	Elm spp	~10,10	3	2	5	No tag - neighbor tree behind wall	x
844	Elm spp	~16	3	2	5	No tag - neighbor tree behind wall - leans over wall	x
845	Western cottonwood	~30	3	2	5	No tag - neighbor tree behind wall	x
846	Privet	~14	4	3	5	No tag - neighbor tree behind wall	x
847	Crape myrtle	~2,2,2,2,2,2,2	4	2	1	No tag, undersized - street tree - can be reconstructed with single leader	
848	Crape myrtle	~1,1,1,1,1	4	2	1	No tag, undersized - street tree - can be reconstructed with single leader	
849	Crape myrtle	~1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	4	2	1	No tag, undersized - street tree - can be reconstructed with single leader	
850	Crape myrtle	~1,1,1,1,1,1,1,1,1,1	4	2	1	No tag, undersized - street tree - can be reconstructed with single leader	
851	Crape myrtle	~1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	4	2	1	No tag, undersized - street tree - can be reconstructed with single leader	
852	Crape myrtle	~1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	4	2	1	No tag, undersized - street tree - can be reconstructed with single leader	
853	Crape myrtle	~1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	4	2	1	No tag, undersized - street tree - can be reconstructed with single leader	
854	Elm spp	~4	5	3	0	No tag, undersized - street tree - can be reconstructed with single leader	
855	Crape myrtle	~1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	4	2	1	No tag, undersized - street tree - can be reconstructed with single leader	

TREES AT THE PROPOSED CAMBRIA HOTEL
3195 N. MAIN STREET, PLEASANT HILL, CA

*THIS MAP IS INTENDED TO BE PRINTED 11x17

DECEMBER 31, 2018

SCALE, 1" = 30'

30 15 0 30 60

SCALE, 1" = 30'

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Three undersized Coast live oaks

824 825 826 827 828 829 830 831 819 820 821 822 823 86 87 88 832 833 834 835 837 838 839 840 841 842 843 844 845 846 813 811 810 809 812 89 808 807 806 83 599 598 597 80 600 82 596 595 90 802 801 803 854 97 814 815 816 594 805 853 855 804 852 850 849 847 851 848 PP

December 4, 2018

Troy Fujimoto
Planning Division, Pleasant Hill
100 Gregory Lane
Pleasant Hill, CA 94523

SUBJECT: Assessment of a single valley oak at the site of the proposed Cambria Hotel and Suites, North Main Street, Pleasant Hill.

PURPOSE OF THIS REPORT

You requested that we assess this tree for potential to remain on the site as proposed development occurs. The purpose of this assessment was to determine the state of health of the tree, estimate impacts of the proposed development on the tree, with measures to reduce those impacts, stability of the tree, to recommend measures, if any, to increase that stability, and convey to you the potential offered by the tree to serve as a long-term asset.

We advise on condition of the tree, but we do not make management decisions. If this tree is retained we will then provide copies of the diagnostics used for your permanent records. If the tree is not retained we will preserve the diagnostics here.

BACKGROUND

This tree experienced the failure or intentional removal of a trunk attached at about 8-10 feet, representing nearly half the tree. This occurred many years ago, so that decay has entered the resulting wound in the trunk. In 2010 we reviewed diagnostics of this part of the trunk of the tree by others, as a peer review for Pleasant Hill. We concluded that Risk[1] from potential failure of the tree was relatively high, because of an adjacent high-occupancy drive-through lane for a fast-food restaurant. We described the tree within that development configuration as moderate to high risk.

At the same time we noted that large roots that join to the base of the tree and support it mechanically, were not visible, implying some degree of fill soil[2]. Because we expected the tree to be removed as a result of diagnostic testing of the trunk wound and exposure from the proposed high-occupancy lane we did not examine the base of the tree more closely. The project proposed at that time was abandoned.

[1] Risk is defined as the probability of an event in a given time period combined with adverse consequences of that event. It is determined through a structured process followed by us and described in the American National Standards Institute A-300 (part 9) Standard, *Tree Risk Assessment*. Risk is described on a scale of, Low, Moderate, High, or Extreme.

[2] The original base of the tree is connected to large roots that spread out and support the tree mechanically. The few inches of tissue close to the surface of this area contains all the vascular, conductive structures. If the lower trunk becomes covered with soil, a condition fostering death of the vascular tissue, followed by decay, is created. This may not always happen but it does in most cases, eventually, and may significantly affect stability of the tree, as well as health. It may be exacerbated by summer irrigation. If the area further from the base of the tree is covered, killing smaller roots, the effect is generally to impair uptake of water and mineral nutrients, usually slowing the growth of the tree.

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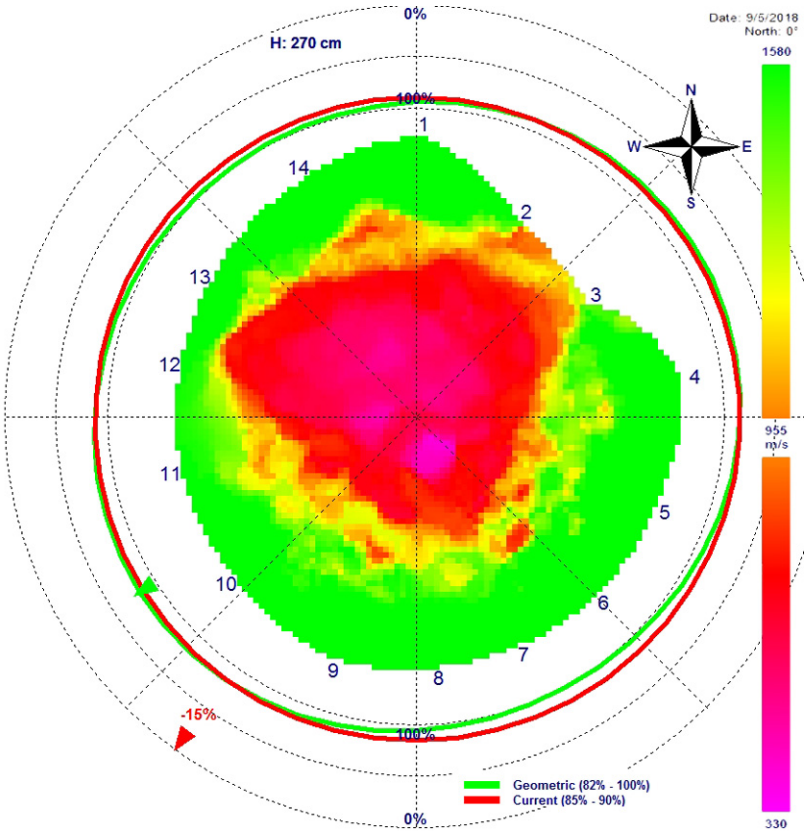
OBSERVATIONS AND ANALYSIS

The tree is 55 inches in trunk diameter. The foliar canopy has two portions, stepped. The taller section to the south-southwest is 47 feet tall, the shorter section to the north-northeast is 41 feet tall. The tree appears reasonably healthy, with new foliar growth this year of 12 to 16 inch length.

Risk from mechanical failure may occur from failure of limbs, or as failure of the entire tree from the trunk or at the ground. We noted there is evidence of past limb failure, and current limb configuration suggests a definite possibility of major scaffold[3] limb failure. We saw no evidence that such limb failure is imminent, but limbs often fail with no further warning than the current configuration and evidence of past failures. Limb failures can be reduced by pruning to remove mass from distal portions of limb systems.

We addressed the potential for failure of the trunk at 8-10 feet where the second trunk was removed. New diagnostic equipment has become available that allows a more precise understanding of the structural capacity of the trunk where there are defects. We imaged the area across the trunk wound at 170 cm above the ground, below the large wound, with a Rinntech Arbotom[4]. We also tested at 270 cm height, across the base of the wound. Our goal was to determine if the trunk at those locations was intact enough to reliably support the top of the tree above it.



The result of the test at 270 cm, using 14 sensors was a map of the sonic characteristics, soundness, decay and strength of the plane across the trunk below the wound site. It is seen to the right. Green represents the greatest velocity, 1580 cm/second, the densest wood. Purple is the least velocity, 330 cm/sec representing internal defect and loss of strength.

The loss of strength of the trunk at this level is 15 percent, toward the south-southwest, the red arrow point in the diagram. The result of the test at 170 cm was similar. We found central decay, but a similar loss of strength, about 16 percent.

[3] Scaffold limbs are the large limbs that form the architecture of the foliar canopy. They either arise directly from the tree trunk as primary limbs or originate from those primaries as secondary scaffold limbs.

[4] Using an array of sonic sensors, an Arbotom creates a set of internal cross-section maps of tree trunks or limbs. These maps correspond to areas of decay, hollows, cracks, or other features that may reduce stem strength, and can be used to estimate loss of strength across the plane being imaged.

We believe this general area is the cross-section of the trunk most affected by the old wound, and we believe the 15 percent loss of strength does not significantly contribute to potential for failure from this location. Further, reduction of the tree to lessen distal limb mass and potential for limb failure will incidentally decrease potential for failure of the trunk from the tested area.

We advised you verbally that limb failure potential could be significantly reduced and Risk from trunk failure was Low. We suggested excavation of the base of the tree to remove fill soil to allow inspection and assessment of the base of the trunk and attached buttressing roots. This excavation was completed by Traverso Tree Service on September 25, 2018.

On November 2 we returned to the tree and completed our inspection, using a sounding mallet[5], then testing with a Rinntech 650 Resistograph.[6] We tested at twelve locations around the base of the tree. We discovered what we consider significant decay in seven of these locations, with at least some decay in three more.

Decay was expressed as either pockets ten to twenty cm across, or as decay of the central basal trunk. The decay pockets are likely rings of decay connecting the detected pockets and following the circular form of the trunk. In any case this decay is of a degree that may lead to failure of the tree from the base, particularly during periods of adverse weather. We cannot characterize this as an unlikely or improbable event. There is no evidence of catastrophic failure of the tree, such as fractures or evidence of increasing lean, but we may not see any such evidence in advance of an actual failure.

We can characterize potential for failure of this tree within the next decade as a possible but not probable event. It may be probable within twenty years. The consequence of such a failure will depend on the presence of cars or people coming to or from their cars within the fall zone. The house to the west would be affected only if the tree were to fail in that direction, but could be seriously damaged if it did.

The proposed parking lot driveway and curb east of the tree trunk will cause soil disturbance and injure roots to within three feet of the trunk, as currently shown. The fill soil that has existed against the trunk cannot be allowed to slough back into the excavation. The slope must be laid back at a 2:1 ratio to allow for slope stability. Toward the east this may intersect the driving area of the parking lot, requiring that the curb may also be required to be a retainer, supported on piers. Depending on the height of the back of the curb it may have to be topped with a railing.

The fill soil around the tree may or may not be populated with critical oak roots near the surface, but critical roots will exist at some depth for at least a twenty foot radius.

[5] Tapping a tree trunk, root or limb with a hickory or rawhide mallet results in sounds of various tenor altered by various wood characteristics. Among these are, if the tapping is in an area of thinned wood over decayed or hollow interior, the sound is often of a different tone than when tapping over solid wood.

[6] A Resistograph inserts a 3 mm diameter probe to a 50 cm depth into the tree. It measures wood toughness along that track and converts the measurement into a graph that can be used to infer decay, cavities, internal knots, or other features.

Conventional subexcavation, compaction, base and surface will typically destroy the roots directly below. The tree may or may not have colonized the fill soil. Nevertheless, any roots, deep or shallow will be affected by compaction and reduced gas exchange to the atmosphere. If there are critical roots near the surface they will be directly removed. In either case installation of a conventional paving surface as shown in the current plan will adversely affect the health of the tree.

Alternative pavement sections are possible. These might be shallower, permeable, built up on existing grade, and supported by a geogrid under crushed rock on uncompacted subgrade. We cannot address how this might affect finish elevations, drainage, requirements for a railing in an elevated curb, surface durability, fire department requirements, or other engineering issues. The alternatives will also affect the tree adversely, but to a lesser degree.

The proposed construction, whether a conventional or an alternate pavement section will have some adverse effect on the health, vigor and appearance of the tree. Lifespan will be shortened, but to what degree is speculation. While we are uncertain of the stability of the tree at the present time, we expect proposed construction will not decrease stability.

The proposal is to put at least thirteen parking spaces within the fall zone of the tree. In addition, the adjacent property to the west has a home within the fall zone. In the future Risk to the lot will be present due to possibility of tree failure, unless the parking lot is reconfigured, with lost spaces. Regardless, Risk will remain to the house to the west.

CONCLUSION

Risk to all areas from failure of limbs can be reduced to Low by careful pruning. Risk to the house from whole tree failure, whether pruning is carried out or not, will be Moderate over the next ten years, on a scale of Low-Moderate-High-Extreme. Risk to the parking spaces within 45 feet of the tree, assuming frequent occupation will also be Moderate within that timeframe. Construction as planned will shorten the useful life of the tree to a degree that is uncertain, but will not alter Risk.

Please note that even without construction disturbance this tree is at the end of its useful life. Unlike slightly younger oaks, or oaks that have not been abused by fill soil and injuries to the base as this one has, this tree will not be present for another century, or even half that. We cannot predict how long this tree will remain alive, but over that time if retained in the proposed design it will continue to present a Moderate, not insignificant Risk and management challenge to the hotel. If this design is retained you may consider removal of the tree as a reasonable option.

CERTIFICATION AND LIMITING CONDITIONS

It is outside the scope of this report to make decision regarding whether this tree should be removed or retained. Questions of cost of design alterations necessary if the tree is retained, acceptable Risk tolerance, the value to the owner of duration and extent of benefits provided by the tree must all be answered by others. However, we are glad to assist in answering these questions as they arise.

I certify that the observations and recommendations in this document are complete and correct, to the best of my knowledge and belief, and are made in good faith. They reflect the condition of the tree as we analyzed it most recently.

The observations, analysis, conclusions and recommendations in this report are intended to reasonably reduce the risk of living and working near trees. Arborists cannot detect every condition that could possibly lead to the structural failure of a tree nor can we fully understand the complex dynamic loading that occurs in trees.

Since trees are living organisms, conditions may be hidden within the tree and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specific period of time. Likewise, remedial treatments, whether performed by others or not, cannot be guaranteed. Trees can be managed but they cannot be controlled.

Please contact me if you have further questions.

Sincerely,

Joseph McNeil
Board Certified Master Arborist #WC-0102B
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